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Original Communications.

IVORY EXOSTOSIS.

By W. C. B. FIFIELD, M.D., Boston.

THE text of this article is furnished by a preparation in the Warren Anatomical Museum, No. 1465, accompanied by a photograph, No. 1464, called, in the catalogue, "Ivory Exostosis of the Frontal Region." The following history of the case is given in the catalogue:—

"Farmer, *at.* twenty-four years, entered the hospital. Three years previously he fell upon the ice, struck his forehead, and just afterwards a tumor appeared. On admission, the tumor extended from the left temple to just beyond the median line, and from the roots of the hair downward into the orbit. Eye protruded and was displaced downward and outward. Oct. 19th, an operation was performed, when a thin shell of bone, deficient at various points, was found expanded over the tumor, and, between the two, a quantity of degenerated pus. Two slices of the tumor were removed by an amputating saw, and then with the mallet and chisel the remaining portion was cut down to a level with the frontal bone and gouged out of the orbit, so that the eye could be restored to its natural position. There was not the slightest sign of vascularity in the tumor. On the 24th, the patient died, having had delirium and coma.

"On dissection, the tumor was found to project internally as it did externally, and to compress the left anterior lobe of the brain which had been converted into an abscess. The right hemisphere, where in contact with the left, was sloughing and purulent for the space of a square inch, but the meningeal inflammation was slight. In structure, the internal, like the external portion of the tumor, was uniformly dense throughout and nowhere cancellated; but from its color and general appearance it would seem to have undergone necrosis, though, being so devoid of vessels, this could not easily be determined. It was loose in the framework of the frontal bone, whereas, when operated upon, it was perfectly fixed. There was also a bony shell about the internal portion as about the external, but without the intervening puriform substance, and the tumor itself was invested with something like a membrane that was easily wiped

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off, and that was not observed on the external portion. The growth seemed to have its origin in the frontal sinus or the diploe of the frontal bone, the bony shell about it being, probably, the expanded inner and outer tables of the bone."

On inspection of the preparation, one is struck with the entire inadequacy of the operation practised, to do more than temporarily relieve the jammed and crowded eye. The great severity of the operation, and, to some degree, the termination of this case as well as others, seem to have proceeded from ignorance of the pathology of the affection, leading to an irrational operation.

Light appears, however, to have broken in upon our darkness, and henceforth we may hope that the diagnosis, pathology and treatment of ivory exostosis will be as well established as that of any other morbid growth of the body.

Certain peculiarities of this exostosis seem to have been known from an early period. Mackenzie says, in his work on Diseases of the Eye, in 1828, "Exostosis may spring from any side of the orbit. We might, perhaps, suppose it more likely to grow from the floor or from the temporal side of that cavity, than from the thin bones which form its roof and nasal side, but this does not appear to be the case." Such exostoses likewise affect the facial bones, as in the case of the son of the surgeon of Perpignan.

Mr. Travers told us of exostoses of the orbit being removed while yet cartilaginous, that these growths could become necrosed and that that they also sprang from the antrum.

Mackenzie also quotes a case from Benjamin Bell, where a peasant succeeded, when a surgeon had failed in removing an exostosis which had pushed an eye nearly out of the socket, by cutting *around*, not *upon* the growth, and applying a secret remedy.

All this indicated: 1st. That these growths sprung either from, or in the immediate neighborhood of, a cavity lined with a mucous membrane. 2nd. That they were originally vascular, else how could they have taken on necrosis. 3rd. That they might be found in the *juice*, so to express it, i.e., in the cartilaginous state. 4th. That to successfully remove them, the circumference of the growth must be attacked and not the surface. Lastly, we may state that what was true of the preparation serving us for a text was found true of all preparations of the kind; that, after maceration, they were found loose in the bone; that they were, as the French say, "*enclavé*," but not indissolubly soldered to the bone, bearing perhaps the same relation to it that an epiphysis does to its diaphysis in early life.

Here the matter stood. Surgeons had, with much sweat and toil, hammered and chiselled at the growths, when, in 1851, M. le Prof. Verneuil found, at the inferior part of the maxillary sinus of a young man twenty-five years old, two or three extremely hard elevations, due to concretions adherent to the mucous membrane. They were scarcely as large as the head of a pin, and were formed of osseous

tissue. They were already adherent to the walls of the cavity, but, nevertheless, could be dissected up by a delicate scalpel. M. Verneuil drew no conclusion from this discovery, and MM. Denonvilliers and Gosselin were the first who thought that exostosis of the sinuses originated from the mucous membrane. Many morbid anatomists verified this thought, and, at a discussion at the Société de Chirurgie, in 1856, when M. Lenoir presented a specimen, M. Grinaldes said that he had seen many examples in the Museum of London, and that Holmes Coote had sent him a note speaking of a beautiful specimen in the collection at St. Bartholomew's Hospital.

From these different labors, the following conclusions resulted :—

1st. That these tumors commence by points of a grayish white color, in the substance of the mucous membrane which covers the nasal sinuses. (They are always found covered, in some part, with a mucous membrane, even when large in size, as proved by the text case.)

2nd. That the hyaline matter which they enclose becomes, at length, osseous.

3rd. That they quickly become adherent to the subjacent walls. (They occur mostly in youths, when the mucous membrane is active and irritable, as shown by epistaxis.)

4th. That they have a great tendency to increase, and in all probability it is from the deep layers of the periosteum, where the phenomena of the growth of bone take place, that their nutrition is drawn. Let it be here remembered that the mucous membrane of the facial cavities is of the order of fibro-mucous membrane and constitutes here a true periosteum.

It is not only in the human species that these productions have been observed. M. Am. Forget has found a large number of small ones in the sphenoidal sinuses of horses, and M. Goubaux has described some very large ones which had invaded the cerebral cavity. These productions have formerly been described as ossifications of the brain, and the observations of Howship, as well as the famous case of the fish woman of London, prove that, in human beings, these tumors can take the place of the brain which they drive into the back part of the skull.

To the other observers, may be added the names of Michon, Maisonneuve and Pamard.

If we allow the premise that ivory exostosis springs from a mucous membrane, we must allow some conclusions which may appear startling.

It must be admitted, firstly, that these exostoses are free in the cavities in which they take their origin, save their attachment to the mother tissue.

Secondly, that they are vascular, cancellated if you like; that

their eburnation is a proof of this, as only intense vascular action can produce eburnation and the characteristic quick growth. In this very element of superabundant life, lies the element of their destruction, the vessels or cells depositing at their termination organic matter, thus gradually strangling themselves and tending to end by necrosis, the increase being from base to apex.

Thirdly, to destroy them, the nutrient vessels at the seat of implantation must be severed; to attack them from the surface is idle trifling. M. Dolbeau, in operating at Hôtel Dieu on one of these exostoses, saw, at the moment of separation, so much blood poured from the divided vessels of the neoplasm, that the state of the patient was extremely critical, and when the separation was accomplished, he was obliged to stop with wax a great nutrient vessel situated in the partition between the two frontal sinuses. M. Richet also saw, in one of his own cases, blood come in abundance from a number of gaping arteries. The reason the operator, in the case taken as a text, did not meet with even the slightest bleeding, was that there were no vessels there. He was dealing his blows upon a dead tissue. Had he got at the pedicle it would have been different.

The origin of the tumor, in the textual case, from the mucous membrane of the frontal sinus, is shown by the concrete pus (which was in all probability mucus, *not* pus) found beneath the external sheath, that is, the anterior wall of the sinus. The membrane over the internal projection of the tumor may be supposed to be the relics of a mucous membrane.

This case, as well as some others, appear to date from a *blow*, received in falling or otherwise. One can hardly believe they owe their origin to this, but it may be believed, either that their growth was hastened by such an event, or that it only helped to remove a resisting wall, already pressed upon by the tumor.

The diagnosis being established, prognosis can be quickly made. The growth may increase to such an extent that life is no longer possible. It may, perchance, become stationary or take on necrosis and be expelled spontaneously; or it may be necrosed, and afterwards be removed by the efforts of art. It may also be removed without necrosis.

From the foregoing statements, we may advise either a wise forbearance from any active interference, or propose a removal of the entire growth, which may now be urged with the more propriety, since we are founded in the belief that the growth, to a certain extent, lies free in the cavity in which it originated. If, after a careful estimation of the extent of the tumor and its probable ramifications, we determine upon removal, how shall we set about it? Certainly not by attacking its surface. Not only would this do no good, but it would expose the patient to the dangers of meningeal inflammation and cerebral abscess, if not followed by death from the rude

shocks of hammering and chiselling. This was the case with patients upon whom Roux and Jobert expended their efforts and whose skulls may be seen at the Musée Dupuytren and at Val de Grâce. If, however, the extent of the tumor forbade its extirpation, they removed only the part most pressed upon, as, for instance, the eye, in our text case.

M. Bouyer (de Saintes) in 1840, although not cognizant of the pathology of the affection, "placed," says M. Richet, "before a case, and pressed by necessity, invented the best method of extirpating exostosis of the frontal sinus." But we are also under great obligations to M. Dolbeau, who, in 1864, encountered at Hôtel Dieu a case of ivory exostosis of the frontal sinus in a young man, and, resting on a firm base of sound pathology, proceeded to its removal. Believing it would be found free in its cavity, it occurred to him that if he could open a wide enough gateway he could pull it out. Acting on this belief, he proceeded thus: the anterior wall of the sinus having been well cleared away from around the growth, he attempted to extract it. In this effort, it broke into two portions. The second part of the operation presented more difficulties; in fact, the posterior hemisphere of the exostosis opposed such a resistance to extirpation, and so much blood was lost, that the life of the patient was, for a time, in much hazard. Finally, these troubles were surmounted, the débris of the growth were removed, and the operation terminated, but, as has been said, the hole of the great nutrient artery of the tumor, "situated upon the partition of the two frontal sinuses," was stopped with wax. The patient fully recovered.

M. Richet also removed an ivory exostosis of the frontal sinus, with like success. "A young miller," says M. Richet, "came to me with an exostosis of the right frontal sinus. After uncovering the salient part of the tumor, which was smooth and rounded, I reached the portion adherent (*enclavé*) to the frontal bone, which formed a sort of pedicle. Seizing this with strong forceps I tried to shake it, but uselessly. I then introduced, between the internal orbital apophysis and a portion of the circumference of the tumor, a long and strong lever of steel, made expressly for the purpose; then by a rocking movement, a crack being heard by all present, the exostosis became movable. I could then seize it, shake it, and pull it out with strong tooth forceps."

Maisonneuve, in his two cases, had the good fortune, in the midst of his hammerings, to chip off a bit, revealing a pedicle which he immediately severed. Lenoir, after having in his case found the pedicle, detached it with a chisel struck with a mallet. In these cases, we see that there is a pedicle or basic attachment which must be separated.

It is proper to say here, that M. Richet, whilst recognizing the pathology of the affection and acquiescing heartily in the plan of

battle, yet holds that the exostosis does not lie free in the cavity, but is closely adherent, although not affirming it to be one with the skeleton. It seems, on the contrary, to be attached in the same way as the epiphysis, and may at length become, in old age, one with the skeleton.

That ivory exostosis of the frontal sinus may be spontaneously loosened sufficiently to be extracted without difficulty, is shown by the case of Mr. Lucas, quoted in Mackenzie's work on Diseases of the Eye, where an exostosis appeared at the inner angle of the orbit, after a blow from a cow's horn. The eye hung pendulous and loose beyond the external edge of the outer angle of the orbit. (Proof of the origin of the tumor from the sinus.) Mr. L., to ascertain the nature of the tumor, which, although hard, appeared loose, made a horizontal incision through the upper eyelid, about an inch in length. On separating the edges of the wound, the tumor was found to be a solid piece of bone, covered by the common integuments and a thin membrane, somewhat resembling periosteum, to which the tumor was but slightly attached. The incision did not heal, but continued nearly its original size, discharging a small quantity of thin pus. The bone continued to increase in size, and the eye was still more pushed out of its natural position. At length, September, 1802, seven months from its first appearance, the patient being in perfect health, the bone became carious, evidently loose, and pushed somewhat forwards. Mr. Lucas endeavored to extract it, by making an incision round the edges of the former wound, and seizing it with strong forceps. The first attempt failed; a second, made a few days afterwards, succeeded, Mr. Lucas extracting, without much force, a piece of bone of oblong shape, weighing an ounce and two drachms, hard, solid and smooth. The extraction was followed by no bleeding. The cavity left was found to be lined with a strong membrane, smooth on its upper and inner sides, but somewhat uneven on the side next the eye. Section of the tumor proved it to be an ivory exostosis. In no part did it show any signs of fracture. This contradicts the idea of bony attachment to the skeleton, and strengthens the comparison to an epiphysis which is also sometimes cast loose by suppuration.

Thus, then, ivory exostosis always originates on or in a mucous membrane lining bony cavities, as the antrum, nasal fossæ, ethmoidal cells, frontal sinus, &c.

Since it is now known that these growths, particularly those of the frontal sinus, are independent of the cranial cavity, and usually of the orbit likewise, one can operate more boldly. The observation of M. Maisonneuve, in the *Archives*, is in point:—"When I felt this enormous tumor, which seemed to come from the very recesses of the cranium, start, it was a moment full of emotion. In what state should I find the walls of the orbit, the eye itself, and the organs which give to it motion and life? These reflections had only

the duration of a flash of lightning, because the instrument had scarcely penetrated the orbit when the tumor was thrown out at once. I then introduced my finger into the orbital cavity, and felt a lively satisfaction in finding that the deep cavity communicated neither with the cranium, nor with the nasal fossæ, and that the eye and its accessories were untouched."

BITE OF THE DIAMOND RATTLESNAKE (CROTALUS
ADAMANTEUS).*

By A. MITCHELL, M.D.

DURING my residence on the St. Illa river, in Southwest Georgia, on the 1st of April, 1864, I had occasion to attend a very severe bite of this venomous reptile, in the case of a colored boy, about fifteen years of age.

He was struck, about six inches above the external malleolus, on the outer edge of the gastrocnemius muscle, the leg being bared, and treading directly on the snake, while in the coil. The fangs entered deeply, inflicting a severe wound, when by his convulsive spring he tore them from his leg.

After receiving the bite, he ran about four hundred yards, and fell, in a convulsive tremor. The cries of his mother brought me to his side, in ten minutes. I quickly applied tight ligatures above and below the knee, with firm compression over the popliteal region, and then made three incisions over the region of the wound, nearly an inch in depth, from which flowed freely a dark grumous blood. Large doses of carbonate of ammonia were freely administered, the bleeding encouraged by sponging the wound with warm water, and then the piston-cups were applied and kept on for about forty minutes, until red arterial blood began to flow. My patient then becoming very weak, I withdrew the cups, after taking twenty ounces of blood. The pulse being depressed, with subsultus continuing, I administered two ounces of spiritus frumenti, with a little water, and had him removed to his home, and placed on his bed; the lower cord around the knee was then removed, and likewise the compression at the popliteal region.

Appearance of the patient much changed; great agitation, stupor, tremor, and prostration of the vital powers. Leg and thigh quite swollen; removed the upper ligature, applied pulvis nucis vomicæ to the wound, and enveloped the whole limb in a poultice composed of young fern, bruised and saturated with a strong alkaline solution. Pulse 130, small in calibre; great thirst; skin cool;

* There are three species in the family—the *Diamond* rattlesnake, with the most poisonous virus of the North or South American continent; the *Banded* rattlesnake, whose virus is not quite so effective, but is destructive of human life; the *Ground* rattlesnake, of an inferior size, whose virus will not destroy human life, whose bite produces a chronic ailment, with pain and periodical swellings of the limb bitten, affected by transitions of temperature similar to that of a gun-shot wound.

twitching of the muscles quite subsided, with the exception of some trembling of the muscles of the thigh; great pain in the region of the wound and along the course of the nerves of the leg and thigh. Skin harsh and dry; ethereal anodyne administered; carbonate of ammonia continued in smaller doses; had a restless night.

2nd day.—Visited him early in the morning; found him feverish; pulse 120, and contracted; countenance anxious. Stupor continues, accompanied with depression of the nervous energies. Sensation of coldness over the whole body. Calls frequently for water, and rejects all nourishment. Slight twitching of the limb. Took three ounces of blood with the cups, just above the wound. Continued the alkaline poultice, with pulvis nucis vomicae to the wound. Administered half a grain of podophyllin, with five grains of Dover's powder. Small doses of carbonate of ammonia continued. Ordered chicken broth; he swallowed a half-cupful with difficulty. Visited him in the afternoon. Leg and thigh much swollen to the hip-joint; bathed the limb with a strong decoction of arnica and applied a firm roller, to be kept wet with the same. Visited him at 9 o'clock in the evening. Symptoms much the same, with sanious fluid escaping from the wound and smaller incisions. Fomented the limb with warm soap suds, and dressed with unguentum hydrargyri nitratis.

3rd day.—Visited him at day-break. Had some rest, from the ethereal anodyne; limb much swollen and sensitive to the touch. Scarified the thigh; a yellowish serous fluid escaped from these incisions. Pain quite abated. Continued the roller and bathing with arnica. Constitutional symptoms somewhat improved; stupor less; pulse more regular, slightly tremulous. Nothing passing his bowels from the date of the injury, gave him an active cathartic, which produced a free bilious evacuation. Countenance, towards the close of the day, looks better; the pallor, shrinking of the features and sinking of the eye, improved; notices his dog; took some nourishment, the first he has taken since the bite, except the half cup of chicken broth.

4th day.—Visited him in the morning. General appearances better; constitutional excitement abated, pulse nearly natural, little above the normal standard; swelling of the limb subsiding; perfectly conscious; yellowish serous fluid still oozing from the wounds. Roller and arnica continued with simple dressings; gave him a dose of castor oil. No aggravated symptoms made their appearance afterwards; appetite returned and he relished his food. On the 8th day, I allowed him to sit out-doors. He had a protracted convalescence, his recovery not being complete until the following month of September; a tonic was used composed of tincture nux vomica and equal parts fluid ext. opium, twelve drops three times per day, with occasional use of the pills of podophyllin. This case presented an unusual symptom, as he would swell to such a degree, at stated

periods, that his natural appearance was hardly recognizable; this quickly disappeared under simple treatment. Discharged, perfectly cured, the middle of September, 1864.

It will be seen that the boy was struck upon the bare surface, his trowsers being rolled above the knee, the fangs entering deeply with the poisonous virus, into a region where the absorbent vessels are distributed freely. The vital and chemical qualities of the blood and its constituent properties are almost instantaneously annihilated by the active conveyance of this virus through the absorbent system to the vital fluid. This boy was saved by the circumstance of my being on the spot directly after he received the bite. The cups and ligatures are hints from the aboriginal mode of treatment in like cases.

Portland, August 8th, 1873.

CONTUSION OF THE HIP.—In a certain proportion of injuries to the hip induced by a fall producing a direct blow, although no signs of fracture can be detected, excruciating pain is experienced, aggravated by motion, and accompanied by a partial loss of power over the movements of the limb, which symptoms may continue for an indefinite period—sometimes even during the remainder of life. In these cases, the inquiry is, *What is the pathological condition giving rise to such a high degree of sensitiveness?* Dr. Charles H. Richmond throws some new light upon this important question, having had the good fortune to obtain a *post-mortem* in the case of a lady seventy-nine years old, who died of cancer seventy days after the receipt of the injury by fall. The only lesion discoverable was disease of the round ligament at its cotyloid extremity, it being softened, discolored and disconnected from the acetabulum. Its femoral extremity was normal, as were also the cartilages of the joint and other ligaments. In this case, acute inflammation of the ligament was probably induced, which rendered it very sensitive to the slightest movement of the joint. The loss of power over the limb may be ascribed, at least in part, to the exquisite sensitiveness.—*New York Medical Journal*, May, 1873.

LYING-IN-HOSPITAL AT JERUSALEM.—This hospital, established by the Baroness B. de Rothschild, is doing excellent work, and proving a precious boon to the poverty-stricken inhabitants of the hallowed city. Dr. Loudon, the director of the institution, lately issued a report, from which we find that 120 females were received at the hospital during the past year; 48 of these were born in Jerusalem, 24 were Russian born, and 19 came from various parts of Turkey. Each inmate on leaving receives a donation of ten francs, and clothing for herself and child. The early period at which marriage is celebrated in Palestine is shown by the fact, that two of the mothers were only fifteen years of age; three had reached sixteen years; five, seventeen years; nine, eighteen years; four, nineteen years; and fifteen had reached their twentieth year.—*Lancet*, July 5, 1873.

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Progress in Medicine.

REPORT ON OTOLOGY.

By J. ORNE GREEN, M.D.

ANATOMY AND PHYSIOLOGY.

(1.) VULPIAN.—La corde du tympan, neuf moteur. *Gazette Hebdom.*, No. 3, 1873.

(2.) PREVOST.—Distribution de la corde du tympan. *Académie des Sciences*, Dec. 30, 1873.

(3.) ZUCKERKANDL.—Zur Entwicklung des äusseren Gehörorgans. *Monatschrift für Ohrenheilkunde*, 1873.

(4.) BOETTCHER.—Kritische Bemerkungen und neue Beiträge zur Literatur des Gehörlabyrinthes. Pp. 88.

(5.) LOEWENBERG.—Ueber die, nach Durchschneidung der Bogengänge des Ohrlabyrinthes, auftretende Bewegungstörungen. *Centralblatt für med. Wissenschaften*, No. 8, 1873.

(6.) MEYER.—On the Pointed Processes of the Auricle. *British Medical Journal*, March 22, 1873.

(7.) URBANTSCHITSCH.—Ueber die membranösen und fadenförmigen Verbindungen in der Paukenhöhle.

(8.) LUCÉ.—Ueber eine Erweiterung des Helmholtz'schen Ohrmodells. *Archiv für Ohrenheilkunde*, vol. i. p. 1.

(1.) At the Paris Academy of Sciences, M. Vulpian gave the results of his inquiries into the changes of nerve fibres from division of the chorda tympani. He is satisfied that some fibres from the chorda tympani terminate in the submaxillary gland and some in the tongue. Those fibres to the tongue, he thinks, give the peculiar motor power which the lingual has after section of the hypoglossal. The lingual he regards as a sensory nerve, but is unable to explain why the fibres of the chorda tympani should only acquire a motor power after section of the hypoglossal.

Vulpian found that, after section of the hypoglossal, when the peripheral portion of the nerve was incapable of excitation, movements of the tongue could be caused by irritation of the lingual nerve. The same movements were caused by irritation of the chorda tympani; but, if the chorda tympani is cut some time before experimenting, all these movements of the tongue are absent. The previous results of Vulpian and Philipeaux now require experimental revision by section of the chorda tympani beforehand.

(2.) M. Prévost asserts that, in carnivora and rodents, section of the chorda tympani, in both ears, produces, in the course of six or eight days, degeneration of those terminal fibres of the lingual nerve which lie in the mucous and submucous tissue, but not of those in the papillæ. After division on only one side, the nerve fibres of the healthy side showed no degeneration. The chorda tympani was only affected at its lingual extremity, whereas the part remaining in communication with the facial was perfectly healthy. Destruction of the sphenopalatine ganglion or section of the Vidian nerve did not produce degeneration of the chorda tympani; and section of the glosso-pharyngeal nerve did not cause degeneration of the terminal fibres of the lingual.

(3.) The development of the external osseous meatus has been studied by Zuckerkandl. In the five months' foetus, the tympanic ring has two osseous tubercles, and from these, after birth, the meatus develops in one of two ways; either by the growth outwards and sideways of these tubercles till they unite externally, enclosing an opening on the anterior aspect of the meatus, which gradually closes by the development of little bony ridges across it, or else by the growth of the tubercles outwards without this fusing together, so that a triangular opening is left on the external edge of the meatus, which is gradually closed by the approach of the two sides. Both of these forms of openings may persist till even the seventh year. Between the twentieth and thirtieth year, the meatus shows its most complete development, but after that age, by a retrograde process, it may be perforated again. Defects of the meatus from arrests of development, Zuckerkandl considers very rare; he found only two in examining a thousand skulls. The causes of the defects often seen, he thinks, are atrophy of the bone, pressure by the under jaw, and, rarely, persistence of the physiological openings (arrest of development).

(4.) In Böttcher's work, which is a critical review of the literature of the labyrinth, his experiments on the removal of the semicircular canals of frogs are of interest. All such previous operations have been done imperfectly, but he, before cutting through the canal, exposed it perfectly, so that he was sure that no other important parts were injured. In opposition to the results of Flourens and Goltz, no disturbance of equilibrium followed the operation of cutting through the semicircular canals, but was seen immediately after any of the deeper parts were injured. What particular parts were injured in producing this symptom he has not determined, but thinks that he can at least conclude that the semicircular canals belong to the ear and do not form a centre for the retention of the equilibrium of the whole body.

(5.) The object of Löwenberg's experiments was to determine whether the disturbances of movement which followed section of the semicircular canals were due to pain; whether the retention of consciousness was necessary for the production of these movements, and whether they were caused by an irritation or paralysis of nerves. The results of these experiments are given as follows:—

1. The disturbances of movement which follow section of the semicircular canals of the ear are the result of this injury, and not of a simultaneous injury of the brain.

2. The vomiting which was observed by Czermak is the result of a simultaneous injury of the cerebellum.

3. The disturbances of movement are the result of irritation, not of paralysis of the membranous canals.

4. The irritation of the canals produces *reflex* spasmodic movements without involving the consciousness.

5. The transmission of this reflex irritation from the nerves of the membranous canals to the motor nerves takes place through the thalamus.

Löwenberg also investigated Brown-Séquard's assertion that section of the *nervus acusticus* produces these same disturbances of movement, and found that, although it was true that in section of the auditory nerve from the tympanic cavity these movements were produced, yet dissection afterwards showed that, in every case, the semicircular canals were simultaneously either crushed or broken through.

(6.) Meyer, of Göttingen, asserts that the pointed processes which are occasionally seen on the edge of the helix of the ear in man, and which Darwin considers similar to the points of the ears of apes, therefore regarding them as an indication of a return to the ape-form, really do not consist of processes, but are caused by gaps existing on each side of the apparent process. He cites a case where the helix was wanting, but in its place were three knobs, which represented the rudimentary helix.

(7.) From his anatomical studies, Urbantschitsch agrees with most modern writers that the membranous and thread-like bands running across the tympanum are remnants of the tissue filling the cavity during fetal life rather than pathological products. These bands connect (1) the long vertical process of the incus with the external wall of the tympanum; (2) the long process of the incus with the manubrium of the hammer; (3) the short process of the incus with the posterior wall of the tympanum; (4) the vertical process of the incus with the chorda tympani; (5) the external tympanic wall with the posterior cells of the mastoid; (6) the tensor tympani muscle with the upper wall of the tympanum. In regard to osteophytes, which Hyrtl had observed frequently in animals, Urbantschitsch found that they existed in the human tympanum between the eminentia pyramidalis, the oval and the round windows.

(8.) Prof. Lucæ has improved Helmholtz's model of the conducting apparatus of the ear by making an opening to represent the round window, and connecting the oval and round windows by a horse-shoe shaped glass tube, the two ends of which are covered with leather and can be placed in contact with the membranes of the windows, thus representing the labyrinth water. Into the upper part of this tube, he inserts another tube, likewise closed at the end with leather. The first tube being filled with water, the waves of sound are conducted through to the round window, and by attaching a König's flame to the upper end of the second tube, the vibrations of the labyrinth water can be demonstrated; or, by attaching an auscultation tube to this end, the vibrations can be heard. The apparatus, which was made for demonstrations to classes, is well adapted to demonstrate the vibration of and method of conduction to the labyrinth of the waves of sound, and also shows the importance of a delicate union of the labyrinth with the tympanic apparatus and the necessity of the tympanic apparatus having the power of free vibration.

PATHOLOGY AND THERAPEUTICS.

(1.) WENDT.—Polypöse Hypertrophie der Schleimhaut des Mittelohres. Archiv der Heilkunde, 1873.

(2.) WENDT.—Secundäre Veränderungen, besonders der Schleimhaut, im Mittelohr. Archiv der Heilkunde, 1873.

(3.) WENDT.—Ueber das Verhalten der Paukenhöhle beim Fœtus und beim Neugeborenen. Archiv der Heilkunde, 1873.

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(12.) LUCE.—Die Perlgeschwulst des Schläfebeines vom Klinische Standpunkte. Berliner Klinische Wochenschrift, No. 13, 1873.

(13.) POLTZER.—Ueber die Anwendung des Trommelfellencatheters. Wiener Med. Wochenschrift, Nos. 9–11, 1873.

(14.) DALBY.—Wound of Portiodura. British Medical Journal, January 11, 1873.

(15.) HINTON.—On Labyrinthine Vertigo, sometimes called Menière's Disease. Guy's Hospital Reports, vol. v., 1873.

(16.) HUGHLINGS JACKSON.—Cases illustrative of Cerebral Pathology. Med. Times and Gazette, March 1, 1873.

(17.) FARQUHARSON.—Hæmatoma Auris. British Medical Journal, July 19, 1873.

(18.) KNAPP.—A Method of operating for the Cleft Lobule of the Ear. Archives of Ophth. and Otol., vol. iii., No. 1.

(1.) Dr. Wendt continues his investigations on the pathology of the ear by the description of the microscopic appearances of the middle ear in a case of mucous catarrh of that cavity. In addition to clear, adhesive mucus in the tubes and tympana, with congestion and swelling of all parts of the mucous membrane lining the cavity, he also found numerous pedunculated (polypoid) growths on different parts of the membrane. These were variable in size, some visible to the naked eye, and many so microscopic as to be visible only with a power of 300.

The vessels of the tympanum and mastoid cells were distended, and showed in places, both fresh and old hæmorrhages; the swelling was chiefly in the sub-epithelial layer of the connective tissue, and lymph-like cells were visible between the fibrillæ. In some parts of this layer, cysts and cavities were seen, but the most interesting appearances were polypoid projections all over the surface of the mucous membrane, some attached by a broad base and some by a peduncle, which microscopic examination proved to be outgrowths from the sub-epithelial layer of the membrane.

The tympanic surface of the membrana tympani showed similar prominences. "In the course of the disease, a hypertrophic condition of the mucous membrane and membrana tympani, with the formation of polypoid projections had been developed—a polypoid hypertrophy." In 73 cases where there was a diffuse swelling of the mucous membrane in the tympanum, Wendt found this polypoid hypertrophy in 29.

(2.) The secondary changes in the mucous-periosteal covering of the tympanum which result from many diseases of the ear and are the

common cause of permanent functional disturbances, are minutely described and figured by Wendt from a case of chronic purulent inflammation of the tympanum, with perforation, in a tubercular subject. Such a thorough examination of all parts of the membrane lining the tympanum has never before appeared, and the pathological changes may be taken as characteristic of a large number of similar cases. The patient was deaf, especially for the last two months, but conversation close to him was understood. The pathological changes were as follows:—On the membrana tympani, destruction of one part, with thickening and rigidity of the remainder; in the tympanum, thickening and rigidity of the mucous membrane throughout, especially in the niches of the labyrinth-windows and on the tympanal covering of the oval window; union of the walls with the membrana tympani and ossicula by recently formed membranes. On the ossicula, thickening and rigidity of their mucous covering, with adhesions between each other and the walls of the cavity and membrana tympani. The osseous portion of the Eustachian tube was much contracted by hypertrophy of the connective tissue of the mucosa; the mucous membrane of the cartilaginous portion was normal; the cartilage itself was calcified.

The microscopic examination of the membrana tympani showed calcification and ossification in the fibrous and external layer, with extensive ulceration of the surface; infiltration of round cells in the layer of mucous membrane, with here and there serous infiltration and the formation of cysts. That of the mucous membrane of the tympanum showed, in the sub-epithelial layer, simple hypertrophy of the connective tissue and the development of cystic cavities; in the periosteal layer, calcification throughout, including the covering of the membrane of the oval window and of the ossicula, and also ossification in some places and the development of osteoid tissue in others. In the new-formed membranous adhesions of the tympanum and mastoid, were found myxoma-like and fatty tissues, and in the cartilage around the base of the stump, was a circumscribed development of extra cartilage, the whole being covered with calcified mucous membrane.

These pathological changes, by involving the membrana tympani, the coverings and attachments of the ossicula and the lesser fenestræ, so interfered with the natural mobility of the conducting apparatus as to cause a great degree of deafness.

Wendt regards the deposition of lime-particles in the periosteal layer of the mucous membrane as the most frequent cause of extreme deafness; and the microscopic examination of the mucous membrane he considers absolutely necessary in order to determine the changes which have taken place, and hence would receive with doubt the assertions of strictly circumscribed calcifications and ossifications which have been made without the use of the microscope.

From his clinical experience, he considers it highly probable that the pathological processes described may be the result of any chronic disturbance of nutrition in the lining of the middle ear, whether in the form of serous, mucous or purulent catarrh, or of the so-called dry or hypertrophic catarrh.

(3.) In order to solve the question of the condition of the tympanum in the fœtus and new-born child, Wendt has carefully examined the ears of eighteen fœtuses and arrived at the following conclusions. In

the foetus which has never respired, the tympanum is filled up by its gelatinous, swollen mucous membrane; this cushion is the sub-epithelial layer of the lining of the tympanum, composed of mucous and gelatinous tissue. The disappearance of this mass results not from a destruction of the tissue or retrograde metamorphosis, but from a change of the gelatinous tissue into fibrous connective tissue; first the intercellular fluid diminishing and then the cell-elements retracting together during the first days of life, gradually forming the fibrous tissue. A marked diminution of the gelatinous tissue, with the consequent formation of a cavity, follows immediately on strong inspiration, whether this takes place in or ex utero. This cavity gradually enlarges as air enters the tympanum through the Eustachian tube and presses upon the cushion. The condition of the tympanum in the foetus, Wendt considers of value in a medico-legal view, concluding that, wherever in a foetus or new-born child the mucous membrane cushion of the tympanum is found perfect, an energetic inspiration, either intra-uterine or post-partum, cannot have taken place, and wherever this cushion is found diminished such an inspiration must have taken place.

[To be concluded.]

A MEDICAL BLACK LIST.—An enterprising publisher in Philadelphia has provided the medical profession in that city with an *index expurgatorius*, the idea of which is very unique, and its object a very significant indication of the relations of the public and the Profession in that city and elsewhere. The publication, which is called the "Credit Guide," has just entered upon its second year of publication. It contains one hundred and forty-four pages, and its purpose is to publish semi-annually the names of persons who employ physicians without rendering them any remuneration for their services, though able (and in many instances abundantly so) to do so, and thus to furnish the physician with such information for the transaction of his business as is furnished by another form to the merchants of the country.

Under no circumstance is it intended to publish the name of any person in indigent circumstances, and who is consequently unable to pay.

Without doubt such a list would be a voluminous one, and must contain many revelations of meanness and avarice, but its object is impossible of attainment. To make it perfect it might contain an appendix, in which would be found the names of medical men who are in the habit of attending any or every comer whether solvent or not, if only to keep them from consulting a rival practitioner. We are profoundly cognizant of the fact, that eighty per cent. of the recipients of so-called medical charity are entirely undeserving of sympathy, and nearly as great a proportion of the money expended on them as charity, is misappropriated. But how can it be otherwise, when medical men who will gladly work without remuneration in any or every case are legion?—*Medical Press and Circular.*

Bibliographical Notices.

Critiques and Addresses. By T. H. HUXLEY, LL.D. New York: D. Appleton & Co. 1873. Pp. 317.

THE papers collected in this volume have appeared at various times, and have all attracted more or less attention. There is but one among them which can be of interest to the medical profession at large, and we therefore will give our attention to that one alone, though it appeared originally more than three years ago. We refer to the address on Medical Education. Early in the address, the orator assured his hearers that the impression that he often found fault because he looked for too high a standard was a mistaken one; that the trouble was that he put his standard too low. He did not care for elaborate superstructures in education, but for a solid foundation, and he declared that the knowledge of physiology in particular, though not "scanty," was singularly "bookish and unreal." This criticism touches the most difficult point in the problem of advancing medical education. We conceive that there is much misunderstanding as to what this word "advancing" means; we hold that it does not imply the acquisition of a thousand and one refinements suited only to the scientist or specialist, and agree most heartily with Huxley that "any one who adds to medical education one iota or tittle beyond what is absolutely necessary is guilty of a very grave offence." Here, however, comes in the very important question what is "absolutely necessary?" which entails the further question, "what kind of men should the medical schools turn out?" If we are content to send forth men whose merits are purely negative, who have not been found disgracefully deficient in more than half of the required studies, who shall transmit unchanged to their children the routine practice which they have pursued without any shocking bad results, it is evident that a great deal is not "absolutely necessary." A great deal, however, is requisite if, as Huxley apparently desires, a graduate is to be thoroughly grounded in the elements of each branch. He speaks not only of physiology as being requisite, but of chemistry and physics as applied to it. He plainly does not mean by this that the student should be familiar with the fine results of such applications, but that he should know the elements of these auxiliary sciences very well, and that he should have acquired a power of drawing conclusions, so that he may be able to follow out any particular line of thought, and ultimately to practise by reason and not by routine. It is a play of words for Huxley to say after this that his standard is low, for what he takes from the medical course he puts into the preliminary one. He makes a good move in wishing to discard botany, geology and comparative anatomy from the regular course, in which, we believe, they hold a place in most English schools. He would also do away with *materia medica*, in which he does not include therapeutics, saying that students might as well be made to study cutlery because they are to use knives. The address should be read carefully by all who are interested in the subject; it is one of the author's happiest efforts; many sentences would serve as headings for deep disquisitions, as for instance: "What the student wants in a professor is a man who shall stand between him and the infinite diversity

and variety of human knowledge, and who shall gather all that together and extract from it that which is capable of being assimilated by the mind."

Boston Medical and Surgical Journal.

BOSTON: THURSDAY, OCTOBER 2, 1873.

AUGUSTE NELATON, whose career has lately come to a close in his 66th year, was one of the most distinguished French surgeons of his time, and, indeed, he may be said to have been quite at the head of his profession in Paris during the last twenty years. He was born in 1807, was a pupil of the illustrious Dupuytren, and took his degree in 1836. After a series of successes in competitive examinations, which resulted in his being appointed surgeon of the Paris hospitals and assistant professor of the Faculty of Medicine, he reached, in 1851, the culminating point of a French surgeon's ambition by being appointed professor of clinical surgery. He occupied this post with great distinction for seventeen years; resigning in 1867, he devoted the remainder of his life to a most extensive and lucrative practice as a consulting and operating surgeon.

He was already very honorably known in the profession, when he was brought into a blaze of public celebrity, attended by a great increase of practice, by his successful use of Charrière's porcelain tipped probe in the case of Garibaldi; he also won additional fame and the gratitude of his sovereign by his successful management of the case of the Prince Imperial. Besides receiving all the honors accessible to a member of the medical profession, he was created Senator by Napoleon III. in 1868; this high reward for his services to his profession and to his country was without precedent, and is worthy of notice as marking a progress in the degree of esteem with which the medical profession is regarded in Europe. During the last two years of his life, he suffered from organic disease of the heart, which was terminated by death on the 20th of September, ult.

His writings were not very numerous, and were all published during the earlier years of his career. His chief publications embraced the following subjects:—Tubercular Disease of the Bones (1836), Tumors of the Breast (1839), Operations for Cataract (1850). His most voluminous contribution to medical literature was his treatise on surgery (*Eléments de Pathologie Chirurgicale*, in five volumes, 1844–1860), which became one of the text-books of the French medical student; only the first three volumes were written by Nélaton, the last two being due to Jamain. A new edition, begun in 1866 by Jamain, and

carried on by Dr. Péan, a pupil of Nélaton's, is at present in slow course of publication, but it can hardly be said to be brought up to the present standard of surgical theory and practice.

Nélaton's great reputation was not based so much on his literary contributions to science as on his clinical lessons and on his success as a practitioner. As a professor of clinical surgery, he was eminently successful; his wards were thronged with pupils, and his lecture room was always too small to contain the numbers of pupils of all nations who came to hear him. He was not what is called a brilliant man, as a speaker, or as an operator, but his simple, earnest manner, his careful judgment, his thorough diagnosis, and his patient and sure way of operating, were such as to deeply impress his audience, and to show them that the welfare of the patient and the teaching of sound, practical surgery were his objects, rather than any display of extraordinary eloquence or manual skill.

In his lectures, his originality was shown in connection with several important points in the theory and practice of surgery; among which may be mentioned retro-uterine hæmatocele, to which he first called attention in France; naso-pharyngeal polypus, to which he devoted several lessons, and for the cure of which singular and grave affection he devised several modes of treatment. He also gave his attention to lithotomy, and instituted the operation to which he gave the new name of "*la taille prérectale*," though it is in reality, as Sir Henry Thompson observes, hardly more than a carefully dissected bilateral operation. Nélaton's clinical lectures have not been published collectively in his own country, but an American translation was published in Philadelphia in 1855, by Dr. W. F. Atlee; the volume contains notes of lectures given in 1851, 1852 and 1853, and embraces a great variety of subjects.

With Nélaton has disappeared one of the last of a group of distinguished and successful practitioners who kept up the traditions of French surgery, as established by Dupuytren, Lisfranc, Boyer, Roux, Blandin and Chopart, and continued by Velpeau, Jobert de Lamballe, Malgaigne, Chassaignac and others of the same stamp. In his own country, among the younger members of the profession, his example and his teachings were most useful, and as a consulting surgeon he will be missed when the careful judgment of a wise and experienced practitioner is needed; but by the medical world at large his loss will now be little felt, for his scientific career may be said to have ended when he resigned his chair at the Faculty of Medicine, and with it the lead he was taking in French surgery.

We publish in this number the translation (kindly furnished by Miss Dimmock) of a letter from Prof. Frey, of Zurich, and one from Dr. J. R. Chadwick, both bearing on the recall by government of the Russian female medical students from Zurich. Prof. Frey complains that a brief mention which we made of the matter some time since contains an error and an injustice, because we implied that immorality was the cause of the recall. Wishing to do justice to all parties, and to obtain all possible light on the subject, we showed this letter to Dr. Chadwick, who had written from abroad a letter which was published in this JOURNAL on Feb. 6th ult. on this question, and asked him to give us the benefit of any information he might possess. Dr. Chadwick has complied with this request in so full and impartial a manner that further comment would be superfluous. We may remark, however, that the spectacle of girls taking part in socialistic meetings, which was one of the mildest charges against them, strikes us as very unpleasant to contemplate.

PATHOLOGY OF MUMPS.—*The Medical Times and Gazette*, June 21, 1873, states that M. Bouchut has addressed a brief communication to the Academy of Sciences on this subject. Regarded to the present time, he says, as a fluxion of unknown nature in children, or as an inflammation of the parotid gland in adults, mumps, according to his researches, really arise from a retention of saliva caused by a catarrhal inflammation of the parotid duct. Under the influence of this catarrh of the excretory canal, a temporary obstruction is caused, which retains the saliva. In children seized with this affection while in a good state of health, the disease is not a serious one, as suppuration does not take place. On the other hand, in subjects of septicæmia or "bacteræmia" mumps is a very grave affection, as suppuration always takes place, and death often results. There is only one way of averting this peril, which consists in making numerous small incisions in the substance of the parotid, before the pus, which is infiltrated into its substance, has time to collect together.

Correspondence.

UNIVERSITY OF ZURICH, Aug. 10, 1873.

MESSRS. EDITORS,—Your JOURNAL of July 10th gives the following statement:—

"We are sorry to hear that the female students at Zürich, of whom we have had such glowing accounts, are too immoral even for Russia, who has recalled her daughters to be redeemed by home influences."

This statement contains an error and an injustice; an error, inasmuch as it is not on account of immorality that the Russian government forbids attendance upon the lectures at Zürich, but on account of the revolutionary and socialistic tendencies of some of the female students.

These latter were in many cases too young to bear the change from the

absolute form of government of their own country to the freedom of a republic without feeling the intoxication of liberty. In the eyes of the Russian government, it is a crime even to visit a political meeting.* Many of these Russian women have, however, by their great diligence and honorable conduct in social relations, won the most general esteem, and proved themselves worthy successors of the pioneers from England and America. The minds of the others were occupied more with political ideas than with the study of medicine.

The rules for matriculation of foreigners having been in some respects too liberal, some of the women who first studied here demanded, some years ago, a stricter examination for matriculation, and this in the interest of women themselves. This measure has now been adopted.

Of the immorality of the Russian students, no one in Zürich knows anything whatever, and the charge is an unjust and wicked pretence of the Russian government and of the numerous spies which it keeps here.

Only two Russian women have obtained here the degree of Doctor of Medicine, and these two are most honorable women. The others were called away by the decree of the Russian government before they could finish their course of study.

Hoping that I have said enough to prove this decree an injustice, I remain

Yours very respectfully,

H. FREY,

Professor of Microscopical Anatomy and Embryology.

MESSRS. EDITORS,—Some months since, I wrote you from Zürich an account of the position taken by the University of that city with reference to the study of medicine by women. I described briefly the rise and progress of the movement which led to the admission of women to the general exercises of the University, and more especially to the medical lecture rooms and clinics. I gave utterance to no expression of personal feeling in the matter, yet the general tenor of my letter was favorable to the female students. This I could not have changed, even had I wished so to do, without having most unjustifiably manipulated and distorted the facts that came to my observation. The small cloud, which at that time was just discernible on the horizon, and to which I alluded when I stated that, "with the increase in quantity (of female medical students) there had been a depreciation in quality," has grown and spread until the whole sky is now overcast.

The immature and plastic minds of the young Russians, who have formed so great a majority† of the female medical students at the University of Zürich, have fallen a ready prey to the wiles and machinations of political adventurers, so that the steady and praiseworthy devotion to study which characterized the pioneers in that field has been supplanted by political agitation, and—what is worse—in some instances by an indulgence in the delusive fascinations of free love.

The *Pall Mall Gazette* is my authority for the statement that the Russian government has levelled a blow at the bechignoned heads of these medical students by announcing to "all the Russian women who attend the lectures at the University and Polytechnic School of Zürich, that such of them as shall continue to attend the above lectures after the first of January, 1874, will not be admitted, on their return to Russia, to any examination, educational establishment or appointment of any kind under the control of the government."

This action is attributed by the official organs to the "unfavorable reports that have reached the government relative to the conduct of these young women. . . . A 'Slavonic Democrat-Socialist Society,' a 'Slavonic Central Revolutionary Committee,' and a Slavonic and Russian Section of the Inter-

* The meetings of the International Society of working-people were regularly attended by some Russian students.

† The number of Russians was 108, and of those from other countries only 20 during the last semester.

national Society have been formed at Zürich, and they number several of the young Russians of both sexes among their numbers. In the Russian library, to which certain editors send their periodicals and newspapers gratis, lectures of a very revolutionary character are delivered. It has become a daily occupation of young Russian girls to attend the meetings of workingmen; political agitation absorbs their youthful and inexperienced minds and leads them into wrong courses. The young women, who have thus been dragged into politics, are entirely under the influence of the leaders of the emigration, and have become their obedient instruments. Some of them go two or three times a year to Russia and back again, taking with them incendiary letters and proclamations. . . . Others allow themselves to be deluded by the communistic theories of free love, and, under the protection of a fictitious marriage, act in utter forgetfulness of all the fundamental principles of morality and decorum."

The document published by the Russian government goes on to justify its action as follows:—"It must not be forgotten that these women will sooner or later come back to Russia, there to become wives, mothers and teachers; and it is the duty of the Russian government to prevent them, as far as possible, from corrupting the youth of the country. To those young women who really wish to obtain a scientific education, ample opportunities are offered by the higher schools of Russia itself, to which students of both sexes are admitted; but there can be no doubt that Russian young women, who go to Zürich, are actuated by different motives than a love of science."

These are the charges made against the Russian female students at Zürich by the government of their country, and the threats which follow are, undoubtedly, elicited solely by the political agitation to which the women have lent themselves, and by means of which their instigators were furthering their schemes.

It is unquestionably an error, as maintained by Prof. Frey in the letter which you showed me yesterday, to suppose that the Russian government was instigated to promulgate the decree above alluded to by solicitude for the morals and the social influence of its few absent daughters, but that there is some truth in the allegation I must believe, because rumors to the same effect were recounted to me during my visit to Zürich in the summer of 1872. Stories about "irregularities"—as New York brokers would express it—in the private life of these young ladies were circulating in Zürich among the younger members of our profession a year ago, though I can easily understand that they did not reach the ears of a person who occupies so eminent a position as Prof. Frey.*

That a change from the quiet home life of a Russian town or village to one of constant intercourse with young men in the study of subjects, where the attention must inevitably have been often directed to the physical and functional differences of the sexes, should have disturbed the moral equilibrium of a few among these girls is but natural, and, in this case, would seem not improbable, since their susceptibility to foreign influences is evinced by the easy and rapid conquest made of them by political agitators. All interested in watching the experiment, which has been tried in Zürich, will, however, give due weight to Prof. Frey's denial of this accusation, and will believe that the charge of immorality is, to say the least, grossly exaggerated.

In this connection, I must avail myself of the opportunity of pointing out the great injustice done these women, who are struggling for medical educations, by establishing for them a different and much higher standard of excellence, both in studies and deportment, than for male students. Let it be remembered by those who are commenting upon the success and progress of any female student that she can only be fairly compared with the *average* male student. It seems to be expected that every woman, who has qualified

* A correspondent of the *Cologne Gazette* asserts that upwards of one half of the Russian women students at Zürich live disreputably, and that many of the Swiss families in town have consequently refused to receive them in their houses.—*Medical Press and Circular*.

herself to practise medicine, must make her mark in the world—be a success, as the term is—and if she falls short of this, her failure is made to reflect unduly upon the abstract question of the qualifications of women to become physicians. I would ask, in reply, how many of the hundreds of young men who obtain medical degrees in the course of a year are ever heard of again?

In morals, the same custom prevails, though here it is but an echo of the judgment pronounced by society throughout all ages.

The interference of the Russian government has driven all but two of its countrywomen from Zürich, while those from other lands remain, so that we may still look to that city for a solution of the vexed problem of "mixed classes," and trust that the prejudice against the question at issue may not be again excited owing to extraneous causes.

I am very truly yours, JAMES R. CHADWICK, M.D.

123 Boylston St., Sept. 14, 1873.

Obituary.

DR. THOMAS MILLER, of Washington, D. C., died suddenly at his residence in that city on Sept. 20th. He was the son of Major Miller, who came with his family to the District of Columbia during the administration of President Madison, and for years was attached to the Navy Department. He graduated from the University of Pennsylvania in 1829. Returning to Washington, he commenced the practice of his profession, in which he has always borne a prominent part. In his earlier days, he was a contributor to this JOURNAL.

PROF. DIXIE CROSBY, M.D., LL.D., of Dartmouth College, Hanover, N. H., died on Friday, Sept. 26th, at the age of 73 years. Professor Crosby represented Hanover in the State Legislature, and was chosen State Railroad Commissioner in 1862. He was a Freemason and was a member of the Royal Arch Chapter at Harland, Vt. His surviving brothers are Dr. Josiah Crosby, of Manchester, N. H., Judge Nathan Crosby, of Lowell, and Professor Alpheus Crosby, of Salem. He leaves two sons, Dr. A. B. Crosby, a professor of surgery at Hanover and at the Medical College at Brooklyn, N. Y., and Dr. A. Crosby, a well-known physician in Concord, N. H.

At the regular monthly meeting of the Berkshire District Medical Society, held at Pittsfield, Sept. 24, 1873, the following resolutions were unanimously passed:—

Whereas, The Rev. John Todd, D.D., an honorary member of this Society, has been removed by death,

Resolved, That we bow with submission to the dealings of Him who doeth all things well, in whose hand our breath is, and whose are all our ways.

Resolved, That in the death of the Rev. Dr. Todd we recognize the loss of one whose associations with this Society were a source of intellectual improvement and high social enjoyment, and that his high office and good words will ever be held by us in grateful remembrance.

Resolved, That in his life of great labor in the pulpit, while battling with disease that would have crippled the energies of ordinary men, and in the great work which he accomplished by his writings, known over the civilized world, Dr. Todd deserved to be ranked among the most distinguished men of the present generation.

Resolved, That we tender his people and his family our deep sympathy in their great bereavement.

Resolved, That these resolutions be entered in the records of this Society, and that a copy be presented to his family, and published in the County papers, *Springfield Republican* and *Boston Medical and Surgical Journal*.

Medical Miscellany.

ENDOWMENT OF A MEDICAL COLLEGE.—James Johnston, of Indianapolis, has endowed the Medical College of the Northwestern Christian University (Indiana) with half a million dollars, and a site for its location.—*The Clinic*.

THE yellow fever continues severe at Shreveport; up to Friday last there had been 440 deaths. The alarm had not subsided in Memphis, and the last reports state that the disease had shown itself in Alabama. Substantial aid has already been sent to the former place from the north, and more is needed.

DR. EDWARD WIGGLESWORTH has given his large collection of models of diseases of the skin and of syphilis, made by Baretta of Paris, to the medical school of Harvard University. The models are exquisite imitations of disease. This generous and very valuable gift furnishes the departments of dermatology and syphilis with additional means of illustration, such as no other school in the country possesses.

The collection has been placed in the museum at the medical college, where it may be seen by physicians.

A REMARKABLE instance of devotion to science occurred in the case of Dr. Otto Obermeier, who died in Berlin, August 20th, from cholera. For several months he had been engaged in examinations of blood in typhus fever, and later, in researches on cholera. He was in the habit of keeping in his bed-room specimens taken from patients who died of cholera and also portions of their excreta. When aware of his condition he made several microscopic examinations of his own blood, although death followed in a few hours.

TREATMENT OF ASTHMA.—Dr. Ad. d'Evot (*Rev. de Thérap.*) gives some directions as to the remedies to be used in asthma. Twelve grammes of flowers of sulphur, with one gramme of tartarized antimony, are mixed with honey and powdered gum, and divided into sixty pills. Three of these represent the dose of Debreyne's powders, and one pill is given morning and evening.

Morning and evening a sheet of nitre paper may be burned in the bedroom or alcove of the patient. The paper may be prepared of white filter paper, dipped in a solution of nitre in the proportion of a drachm to an ounce.—*The Doctor*.

DISINFECTANTS.—In the *Zeitschrift des Oester.-Apothek.-Vereines*, February 10, 1873, Albert Eckstein published an account of his attempts to disinfect a privy which was used daily by one hundred persons, and the results are so interesting that they are here transcribed:—

1. Two pounds of sulphate of iron in solution. After from two to three hours all bad smell had disappeared, but in twelve hours all the influence of the disinfectant was lost.
2. Sulphate of copper in solution, the same.
3. Two pounds of sulphate of iron in crystals; their effects lasted two days.
4. Sulphate of copper, the same.
5. Sulphurous acid in solution rapidly lost its effect, and was exceedingly irritating to the respiratory organs.
6. Two pounds of impure carbolic acid filled the house for two days with such a disagreeable smell that it was impossible to tell whether the original odor was destroyed or covered up.
7. Two pounds of sulphate of iron in a parchment sack exerted a disinfecting influence for three full days, and when the parchment sack was drawn up it contained only some dirty, odorless fluid.
8. Two pounds of the best chloride of calcium, in the parchment sack, disinfected the privy for, at least, nine days.

At the first meeting of the Society for Medical Observation, on Oct. 6th, Dr. J. G. Blake will read a paper on "Illustrations of Conservative Surgery."

A MOVE IN THE RIGHT DIRECTION.—At a meeting of the California Medical Society, the following resolution was introduced by Dr. Ira Oatman, of Sacramento :—

"Resolved, That it is the duty of, and we hereby recommend to, the Legislature of California to pass a law making it a misdemeanor for any person, for any purpose whatever, who is not a graduate of some institution of learning authorized by law to confer the degree of 'Doctor of Medicine,' who shall place before or after his or her name, in any manuscript, label, wrapper, card, hand-bill, circular, newspaper, pamphlet, magazine, book, or any advertisement, the word 'Doctor' or the abbreviation M.D. or Dr., or any others signifying directly or constructively that the person is a graduate of such an institution, or who shall authorize or sanction the same by others in his or her interests; and that any person found guilty of such misdemeanor shall be punished by a fine of not less than — dollars, or imprisonment for not less than — years, or by both such fine and imprisonment."—*Western Lancet*.

THE SUFFOLK DISTRICT MEDICAL SOCIETY opened the campaign on Saturday last with a very interesting meeting. Dr. Chadwick showed a curious pedunculated tumor, weighing four ounces, which he had removed from the outer surface of one of the labia majora of a woman fifty-four years old. Dr. C. D. Homans spoke briefly of two cases of strangulated hernia in which he had used the pneumatic aspirator. In one of two days' standing, he had met with perfect success; in the other, no fluid was obtained, and the knife was resorted to with good results. He had also punctured the bladder above the pubes with the aspirator, in three cases of retention of urine, with most gratifying success. Dr. John P. Reynolds spoke of a statement he had seen of the advantage gained by puncturing the middle of the placenta, when apparently adherent, so as to admit air below it. This led to a somewhat extended discussion of physics of the placenta and uterus, followed by a more practical one on certain points in the management of labor. Several gentlemen dwelt upon the advantage of not hastening to complete the delivery after the birth of the head, and Dr. Reynolds spoke strongly of the absolute quiet and absence of friends, light, and even of the child, which should be enforced directly after delivery. Dr. Ayer reported a case of supposed mediastinal abscess breaking into the lung. After some incidental business, the society adjourned to the usual supper, having begun the season most auspiciously.

MORTALITY IN MASSACHUSETTS.—Deaths in sixteen Cities and Towns for the week ending September 20, 1873.

Boston, 155—Charlestown, 12—Worcester, 26—Lowell, 25—Milford, 1—Cambridge, 28—Salem, 11—Lawrence, 24—Springfield, 10—Lynn, 18—Fitchburg, 4—Newburyport, 4—Somerville, 9—Fall River, 32—Haverhill, 5—Holyoke, 8. Total, 372.

Prevalent Diseases.—Cholera infantum, 68—consumption, 34—typhoid fever, 27—dysentery and diarrhoea 19—scarlet fever, 14.

GEORGE DERBY, M.D.,

Secretary of the State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, Sept. 27th. 151. Males, 82; females, 69. Accident, 6—apoplexy, 1—inflammation of the bowels, 2—bronchitis, 1—disease of the brain, 5—cyanosis, 1—cancer, 4—cerebro-spinal meningitis, 2—cholera infantum, 29—consumption, 23—convulsions, 2—croup, 1—debility, 1—diarrhoea, 5—dropsy, 1—dropsy of the brain, 4—dysentery, 3—diphtheria, 3—epilepsy, 1—scarlet fever, 5—typhoid fever, 12—bilious fever, 1—gangrene, 1—disease of the heart, 2—intemperance, 1—disease of the liver, 3—congestion of lungs, 1—inflammation of the lungs, 1—marasmus, 12—old age, 3—paralysis, 2—premature birth, 1—peritonitis, 1—puerperal disease, 3—suicide, 1—disease of the spine, 1—tabes mesenterica, 1—teething, 1—uterine cellulitis, 1—ulcer of the stomach, 1—unknown, 1.

Under 5 years of age, 78—between 5 and 20 years, 12—between 20 and 40 years, 36—between 40 and 60 years, 16—over 60 years, 9. Born in the United States, 114—Ireland, 25—other places, 12.